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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,327	02/22/2005	Koichi Suzuki	03500.017494	5080

5514 7590 10/30/2006

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NEW YORK, NY 10112

EXAMINER

THOMPSON, CAMIE S

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/525,327

Applicant(s)

SUZUKI ET AL.

Examiner

Camie S. Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/4/05; 2/22/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9-12 are rejected under 35 U.S.C. 112; second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 9 and 10 are not commensurate in scope with claims 1 and 3 in which they depend, respectively. Claims 1 and 3 require condensed polycyclic aromatic or heterocyclic groups attached to the spirobifluorene. Claims 9 and 10 have arylamines attached to the spirobifluorene. Claims 11-12 are not commensurate in scope with claims 1 and 3 in which they depend, respectively. Claims 9 and 10 do not require polycyclic condensed aromatic or heterocyclic groups attached to the spirobifluorene.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

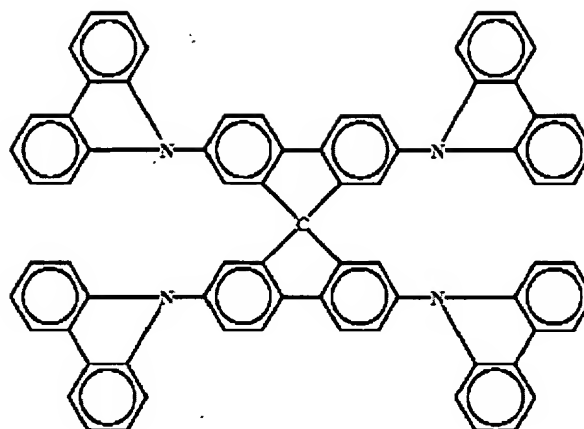
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 5, 7 and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by

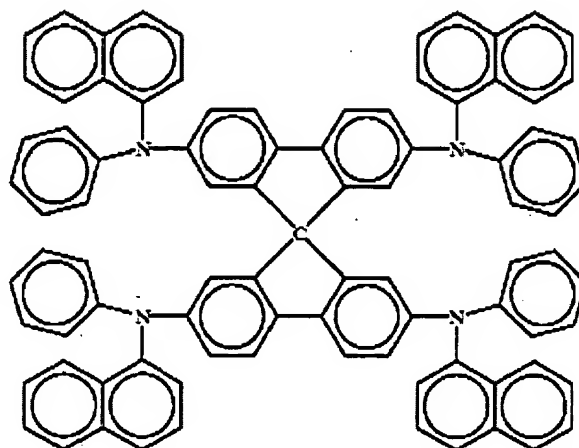
Nishi et al., U.S. Pre Grant Publication 2002/0034659.

Nishi discloses a light emitting device comprising a spiro compound

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The reference reads on the instant claims when R_1 to R_4 is hydrogen and Ar_1 to Ar_2 is each is a carbazole group. It is disclosed in claim 3 of the reference that the electroluminescent device comprises a compound with the structure

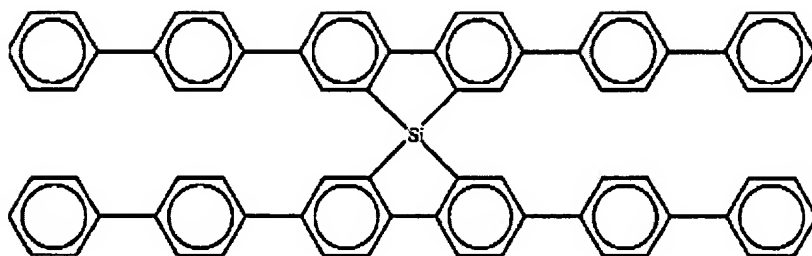


which reads on instant claims 9 and 10. Additionally, the reference reads on instant claims 9 and 10 when R_{21} and R_{22} of the instant claims form a fluorene ring.

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5. Claims 3, 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kreuder et al., U.S. Patent Number 6,329,082.

Kreuder discloses heterospiro compounds such as



Kreuder also discloses that the heterospiro compounds can be used in electroluminescent devices (see reference claims 8-9).

Claim Rejections - 35 USC § 103

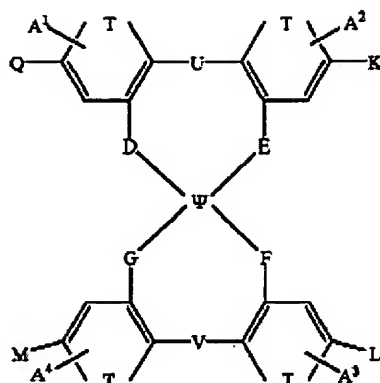
6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Kreuder et al., U.S. Patent Number 6,329,082.

Kreuder discloses spiro compounds with the general formula

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wherein Ψ can be Si and D,E,F,G, U and V are CR_1R_2 with R_1 and R_2 are hydrogen.

Additionally, the reference discloses that K, L, M and N can be cyclic hydrocarbon radicals that can contain heteroatoms and substituents (see reference claim 1). The reference does not provide for the polycyclic groups as recited in the instant claims. However, the reference does provide for generic cyclic compounds that would encompass the polycyclic compounds recited in the instant claims. Therefore, it would have been obvious to one of ordinary skill in the art to use the condensed polycyclic groups of formulae I-IX found in the instant claims in that they are encompassed by the generic cyclic groups disclosed in the Kreuder reference.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena L Dye, can be reached at (571) 272-3186. The fax phone number for the Group is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



RENA DYE
SUPERVISORY PATENT EXAMINER

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10/27/04